Art. XXXI.—*On a new Paper Nautilus* (Argonauta bulleri).

By T. W. Kirk.

[*Read before the Wellington Philosophical Society, 24th June*, 1885.]

Plate IV.

It may be remembered that last year I had the pleasure of exhibiting quite a fleet of "paper nautilus," and of describing a new species (*A. gracilis*), for several specimens of which I was indebted to Mr. C. H. Robson, of Portland Island. That gentleman then informed me that he believed there was a third species on the New Zealand coast, but that he had never been able to obtain a perfect specimen. In the "New Zealand Journal of Science" for May, 1884, he mentions having obtained a perfect shell; and in a letter lately received he says: "I told you of a supposed new species of *Argonaut*, found by me on Portland Island in March, 1884. . . . I will ask you to examine, describe, and name the specimen which I now forward to you. If it is new, I should like it named after our mutual friend Dr. Buller, who, notwithstanding all he has done for the natural history of New Zealand, has only one bird dedicated to him. . . . For some time before I obtained the shell which you will receive, I felt sure that a third species visited our shores, having found fragments of shells which did not seem to belong either to *A. tuberculata* or *A. gracilis;* but on account of the fragility of the shells in question, the pieces were always too small for practical use, till I obtained the nearly perfect specimen which you will receive, and which you will at a glance perceive is quite distinct from either of the two species above named. I wish to present it to the Colonial Museum, if new, as a type specimen."

As I have no doubt about its being a new species, I have great pleasure in complying with the discoverer's wish, and naming it after New Zealand's premier ornithologist.

Description.—Shell translucent, sides much compressed, especially towards the keel, giving the aperture a hastate shape; sides with numerous transverse plications, which are *not* tuberculiferous, sides project near the spire into wing-like processes, similar to those of *A. tuberculata*, causing this end of the aperture to look nearly straight. Keels very close together, with small compressed tubercles; colour, white.

Loc.—Portland Island.

This shell is very much thinner, more fragile, and of finer texture even than *A. gracilis*, and may be distinguished by the general form of the shell, the shape of the aperture, the angle at which the wings spring from the sides, the much narrower space between the keels, and by the plications being true, not

Art. XXXI.—*On a new Paper Nautilus* (Argonauta bulleri).

By T. W. Kirk.

[*Read before the Wellington Philosophical Society, 24th June*, 1885.]

Plate IV.

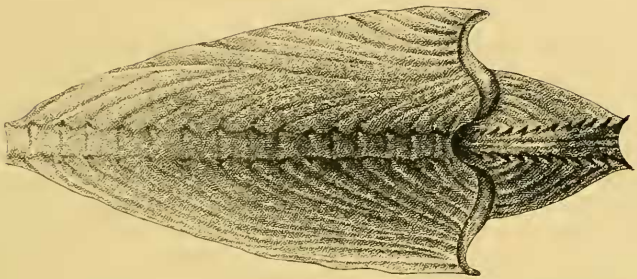
It may be remembered that last year I had the pleasure of exhibiting quite a fleet of "paper nautilus," and of describing a new species (*A. gracilis*), for several specimens of which I was indebted to Mr. C. H. Robson, of Portland Island. That gentleman then informed me that he believed there was a third species on the New Zealand coast, but that he had never been able to obtain a perfect specimen. In the "New Zealand Journal of Science" for May, 1884, he mentions having obtained a perfect shell; and in a letter lately received he says: "I told you of a supposed new species of *Argonaut*, found by me on Portland Island in March, 1884. . . . I will ask you to examine, describe, and name the specimen which I now forward to you. If it is new, I should like it named after our mutual friend Dr. Buller, who, notwithstanding all he has done for the natural history of New Zealand, has only one bird dedicated to him. . . . For some time before I obtained the shell which you will receive, I felt sure that a third species visited our shores, having found fragments of shells which did not seem to belong either to *A. tuberculata* or *A. gracilis;* but on account of the fragility of the shells in question, the pieces were always too small for practical use, till I obtained the nearly perfect specimen which you will receive, and which you will at a glance perceive is quite distinct from either of the two species above named. I wish to present it to the Colonial Museum, if new, as a type specimen."

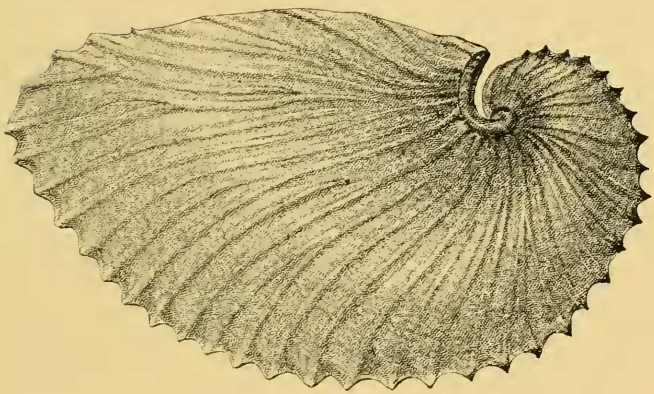
As I have no doubt about its being a new species, I have great pleasure in complying with the discoverer's wish, and naming it after New Zealand's premier ornithologist.

Description.—Shell translucent, sides much compressed, especially towards the keel, giving the aperture a hastate shape; sides with numerous transverse plications, which are *not* tuberculiferous, sides project near the spire into wing-like processes, similar to those of *A. tuberculata*, causing this end of the aperture to look nearly straight. Keels very close together, with small compressed tubercles; colour, white.

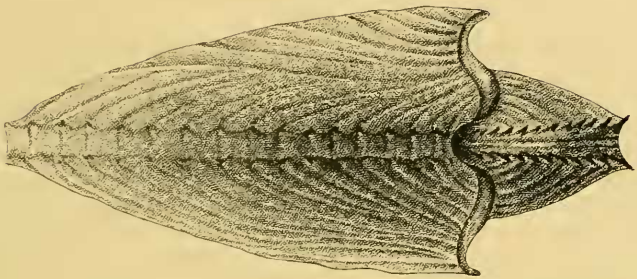
Loc.—Portland Island.

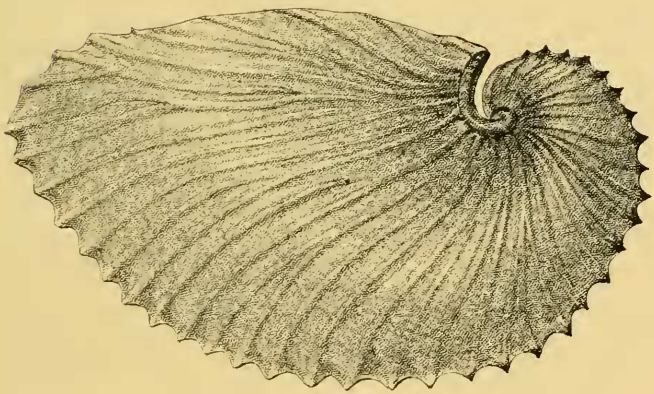
This shell is very much thinner, more fragile, and of finer texture even than *A. gracilis*, and may be distinguished by the general form of the shell, the shape of the aperture, the angle at which the wings spring from the sides, the much narrower space between the keels, and by the plications being true, not





ARGONAUTA BULLERI. n. sp.





ARGONAUTA BULLERI. n. sp.

made up of numerous tubercles as is the case with *A. tuberculata* (Shaw), and *A. gracilis* (*mihi.*) The nearest species is apparently *A. argo*, from which it is distinguished by the wing-like processes and other minor differences.

Art. XXXII.—*Description of a new Pill-Millipede.*

By T. W. Kirk.

Read before the Wellington Philosophical Society, 23rd September, 1885.

The *Myriapoda* have occasioned much diversity of opinion amongst naturalists in time gone by. Some have classed them with insects, some with spiders, and some with Crustacea, for they possess characters allied to each of these; but the distinction of a separate class is now generally accorded them, and this class is divided into four orders. I. *Chilopoda*, contains the carnivorous centipedes. II. *Chilognatha*, the vegetable-eating millipedes (*Iulidæ*), the gallyworms (*Polydesmus*), and the pill-millipedes. III. The third order was created for the reception of a peculiar little animal, one-twentieth of an inch in length, which possessed characters totally different from those of any member of the two orders previously mentioned. This little creature was discovered and described by Sir J. Lubbock. IV. The fourth order contains that extraordinary genus of animals found in the West Indies, South America, South Africa, and New Zealand; I refer to the *Peripatus*. So puzzling are the characters presented by this genus, that it has been at different times referred to the errant *annelids*, the leeches, the tape-worms and the *Myriapoda*; in the last-mentioned it remains for the present. And though its position is by no means satisfactory, it yet appears to be more nearly related to the *Myriapods* than to any other group.

The animal to be noticed this evening belongs to the second order, or vegetable-eating millipedes, and will be called *Sphærotherium novæ-zealandiæ*.

Sphærotherium.

The segments resemble those of *Glomeris*, but are fourteen in number, including the head, and twenty-one pairs of legs. Eyes grouped together, and situate on an eminence on each side of the head, just above the insertion of the antennæ.

Sphærotherium novæ-zealandiæ.

Head, coarsely punctured, especially near anterior margin, which is notched in the centre, and strengthened by a ridge, immediately behind which is a transverse groove, and in front a number of yellow and brown hairs; the groove and the space around is closely but coarsely punctured, the punctures becoming much more distant as the posterior margin is approached.